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<110> Sun, Yongming Recipon, Herve Salceda, Susana Chenghua, Liu

<120> Compositions and Methods Relating to Ovary Specific Genes and Proteins

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tagaaatgca agtaaacata aaaagctcaa acttacttaa aaacttaaaa tgaaatattc
                                                                       180
                                                                       240
gtaaataaaa ctattactga gggcctataa aattttgggt taaaatgaaa tggtaatact
taataaatgt tagggcacaa tgatgctatc tttcttacat ctttctttt agaagtaact
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tatttcaatg tttctggaaa gcaatttgat aatttttata ttactacaaa aatatggtag
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                                                                       420
aaagactgaa agcaattctt catagccttg tttatatgaa gggaaactga aaacngccta
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ttaaattaaa agaacccggc cantgcantg ttcatgccta taat
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                                                             120
atttacataa aaataaaact atacttttga taacgtcctg ggcacttccc tctgcttact
                                                             180
ccccctcaat taaaaaatgc ctaatttaaa ttaaaagaac ccggccaggt gcagtgtttc
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atgcctataa tcccagc
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aatcgtaaag cttctgaact actaaggaag ggaaaagagg ggcccagggc ccacatgtgt
                                                             120
180
240
nnnnnnnnn nnnnnnnnn nnnnntcctg gtgttcaggc ctcatgcctt ctgttcttaa
                                                             300
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ctccatatco	tgtgtccctg	ggaaaggaag	gggccatagt	ctggagtggt	ttccaggaga	360
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gcacagggat	aaaggattgt	taaccagact	ggcaaatcag	tagactaatt	aaaaatcaaa	480
caccttaaaa	a cactgtcgct	gggttaattg	taaaccaaca	atgaaacgtt	aaatttgccc	540
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aatggcacag	, atattactaa	ttaagcacta	atcccagagg	cggcgagctt	gtggccttcc	240
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aacctgcago	: tggctgagcc	acagaggtca	gggcagtctg	tgattttcag	tcaggacaca	300
gaaagcaago	: aggaggaact	ggaggaccct	gcggctgcct	gtaacaagaa	ataaaaatgg	360
cacagatatt	actaattaag	cactaatccc	agaggcggcg	agcttgtggc	cttcctgttc	420
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                                                                    180
aaaactattc ctgcaaattg ttgtattaca taaatgttat tgactcctca accatggttt
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tttcaagaac agcaacctaa aatactcata cagttagctc taacaatgtt tacaagtctt
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aaaactattc ctgcaaattg ttgtattaca taaatgttat tgactcctca accatggttt
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gcctgtagtc ccatctactg gggaggctga gtcaggagga ttgtttgagc ctggagtttg
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<223> n= a, c, g or t
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cattatactt cttgaagctt ctgttttatt cagtttgtgt agaggtgaat gccctactga
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agaatctgtt tttcaaagat tatccaagaa aatatttttt gagagaattc tagtggattt
                                                                    360
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gaganaaaaa tggagaacta aaatgtggag actcacgaag agcagagtga gcttnaagaa
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                                                                    120
acceatetet tetetaatat tggaaacagg tggaaaaace acctgggete teagacagat
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gtctttgttt ttaaatattt cagaaaatga ggtagggagg gactgaccaa gggcagcgag
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gggcccaagt ngggaggaag aacagtgtgt gcctgctggg ctcagcatct gctccagtga
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acceatetet tetetaatat tggaaacagg tggaaaaace acctgggete teagacagat	180
gtctttgttt ttaaatattt cagaaaatga ggtagggagg gactgaccaa gggcagcgag	240
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gcaacacggg ggtgactggg ggtctgctga atgttaaata taaaggaagt tccttttccc	420
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                                                                     240
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teteactgtg ttacceagge tggtetegea gtettggeet gaagtgatte teteacettg
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ctgttgggtg atgatgccac tgaagagccg tccttagtgt cacgtggtgc tggtctgagg
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aagaacataa ggtgtgaccc atctggacta aaaaaaataa agcagaattg tatcaattgc	180
tactcctttt tattcccanc tngttttnct nattttttt tttaattccc atcttgtaag	240
agaattccca gggagccttt ttgagagaaa gttcattgga tttattttt taattttat	300
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taatatccag tetettgggg aactetagga gtatttgett aagacacate tttgggttee	420
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<211> 14

<212> PRT

<213> Homo sapien

<400> 138

<210> 139

<211> 18

<212> PRT

<213> Homo sapien

<400> 139

Met Phe Leu Ser Ser Val Leu Tyr Cys Ser Leu Leu Ser Tyr Leu His 1 5 10 15

Leu Ser

<210> 140

<211> 449

<212> PRT

<213> Homo sapien

<400> 140

Leu Phe Pro Arg Leu Glu Tyr Gly Gly Thr Ile Leu Ala Tyr Cys Asn
1 5 10 15

Leu His Leu Pro Gly Ser Ser Asn Pro Pro Thr Ser Ala Ser Gln Val 20 25 30

Ala Gly Thr Arg Asp Val Cys His His Thr Trp Leu Val Cys Val Cys

Val Cys Val Cys Val Cys Val Cys Val Glu Met Arg Phe His 50 55 60

Tyr Val Ser Gln Ala Gly Leu Glu Leu Leu Ser Ser Ser Asp Pro Pro 65 70 75 80

Ile Ser Ala Ser Gln Ser Ala Gly Ile Ile Gly Ile Ser His Cys Thr 85 90 95

Trp Pro Trp His Asp Ser Phe Ile Ser Pro Gly Ala Glu Leu Pro Thr 100 105 110

Phe Ala Tyr Thr Trp Pro Gly Arg Pro Lys Ile Pro Leu Thr Ile Leu 115 120 125

Leu Leu Tyr Pro Gly Pro Gly Asp Val Leu Val Ala Phe Arg Thr Glu 130 135 140

Arg Glu Ser Trp Gly Asn Gly Ala Val Pro Asp Phe Leu His Lys Glu
165 170 175

Trp Leu Ile Phe Cys Pro Phe Ser Asn Gln Ser His Leu Trp Thr Thr 180 185 190

Lys Ser Lys Trp Ala Glu Val Pro His Pro Gly Arg Arg Ala Glu Leu 195 200 205

Pro Ala Met Lys Glu Gln Lys Ala Ala Asn Glu Asn Ser Gly Ser Val 210 215 220

Thr Glu Pro Ser Ser Ser Ala Ser Ile Leu His Ala Arg Trp Asp Val 225 230 235 240

Tyr Phe Leu Ile Asn Ala Leu Ile Tyr Phe Leu Arg Gln Ser Leu Arg 245 250 255

Ser Val Ala Gln Ala Gly Val Gln Trp Cys Ser Gly Ala Asp Leu Gly 260 265 270

Ser Leu Gln Pro Leu Pro Pro Gly Phe Lys Ala Phe Pro Cys Leu Ser 275 280 285

Leu Leu Ser Ser Trp Asp Tyr Arg Ser Leu Pro Pro Cys Pro Ala Asn 290 295

Phe Phe Val Phe Leu Ile Glu Thr Gly Phe His His Ile Ser Gln Ile

Ser Ile Ser Ala Pro Cys Asp Pro Pro Ala Ser Ala Ser Gln Ser Ala 325 330

Gly Ile Thr Gly Met Ser His Cys Ala Gln Pro Asp Val Tyr Tyr 340 345

Val Ser Gly Tyr Ile Gly Lys Gln Asp Arg Cys Tyr Leu Phe Phe 355 360

Phe Phe Phe Glu Thr Glu Ser Arg Thr Val Ala Gln Ala Gly Arg 375

Leu Glu Arg Ser Gly Ala Ile Ser Thr Arg Arg Ser Leu Gln Pro Leu 385 390 395

Pro Pro Gly Leu Lys Arg Phe Ser Cys Leu Ser Leu Leu Ser Ser Trp 405

Asp Tyr Arg Cys Thr Pro Pro Arg Leu Ala His Phe Cys Thr Phe Ser 420 425

Arg Asp Gly Val Ser Pro Cys Trp Ser Gly Trp Ser Leu Ser Pro Asp 435 440

Leu

<210> 141

<211> 11 <212> PRT <213> Homo sapien

<400> 141

Met Ile Ala Ile Phe Leu Ser Phe Leu Phe Phe 5

<210> 142

<211> 40

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<212> PRT
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<213> Homo sapien

<400> 142

Met Asp Ala Lys Gln Asn Val Glu Lys Thr Tyr Cys Pro Ala Leu Ser

Gly Ser Phe Gln Asp Ser Met Ile Tyr Trp Glu Arg Ser Asn Ser Leu

Pro Leu Pro Ala Thr Cys Lys Pro

<210> 143

<211> 17

<212> PRT

<213> Homo sapien

<400> 143

Met Asp Gly Phe Val Lys Asp Gln Ala Thr Ser Ser Leu Pro Leu Ala

Thr

<210> 144 <211> 24

<212> PRT

<213> Homo sapien

<400> 144

Met Ala Ser Lys Pro Asn Leu Leu Tyr Ile Leu His Tyr Cys Val Pro 10

Asp Thr Ala Asn Ser Ile Asn Glu 20

<210> 145

<211> 20 <212> PRT <213> Homo sapien

<400> 145

Met Ser Cys Ser Ser Ser Thr Gly Ala Gly Lys Tyr Asn Leu Lys Gly 10

Glu Ala Asn Leu

20

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<210> 146
<211> 107
<212> PRT
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<213> Homo sapien

<400> 146

Tyr Tyr Phe Tyr Tyr Phe Phe Leu Arg Glu Ser Leu Thr Leu Ser 1 5 10 15

Leu Gly Leu Glu Cys Ser Gly Val Thr Met Ala His Gln Thr Ile Asn 20 25 30

Ile Pro Gly Ser Ser Asn Ser Pro Val Val Val Gly Thr Thr Gly Ala 35 40 45

Cys His Asn Ala Trp Leu Ile Phe Val Phe Leu Val Glu Thr Gly Leu 50 55 60

His His Val Gly Gln Ala Gly Leu Gly Leu Leu Ala Ser Ser Asp Leu 65 70 75 80

Ser Ala Leu Ala Ser Pro Ser Ala Gly Ile Ile Gly Leu Ser His Cys 85 90 95

Thr Gln Gln Lys Thr Asn Phe Leu Lys Gln Asn

<210> 147 <211> 18 <212> PRT <213> Homo sapien <400> 147

Met Arg Ser Asn Phe Lys Lys Asn Ile Pro Ser Leu Glu Leu Phe Asn 1 5 10 15

Met Ser

<210> 148 <211> 99 <212> PRT <213> Homo sapien <400> 148 Leu Phe Ser Phe Ala Arg Gln Asp Val Ser Met Leu Pro Arg Leu Glu 10

Tyr Ser Gly Gly Ile Ile Ala His Cys Lys Leu Asp Val Leu Asp Ser

Ser Glu Leu Thr Ala Leu Thr Ser Gln Ile Ala Gly Thr Thr Gly Val 40

His His His Ala Arg Leu Ile Phe Thr Met Phe Met Gln Met Gly Ser 55

Cys Ser Val Ala Gln Ala Cys Leu Lys Leu Leu Ala Ser Asp Pro 70

Pro Ala Phe Gly Ser Gln Ser Ala Gly Ile Ala Asp Val Ala His His 85 90

Ala Gln Pro

<210> 149

<211> 64

<212> PRT <213> Homo sapien

<400> 149

Met Ser Val Ser Val Leu Pro Val Gln Pro Pro Thr Gly Leu Leu Trp

Gly Arg Ser Pro Pro Gly Ser Pro Ala Glu Leu His Gly Leu Pro Cys 25 20

Leu Thr Arg Asp Asn Arg Asp Phe Gly Ser Pro Ser Ala Asp Ala Phe 35 40 45

Val Leu Phe Leu Ile Arg Ser Arg Thr Arg Val Gly Arg Arg Val Met 55 50

<210> 150

<211> 23

<212> PRT <213> Homo sapien

<400> 150

Met Val Glu Ser Gly Ile Glu Pro Glu Asn Ser Asp Ser Arg Leu Ser

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Cys Phe Ser His Arg Ala Val
      20
<210> 151
<211> 27
<212> PRT
<213> Homo sapien
<400> 151
Met Ile Gln Arg Leu Leu Arg Gly His Asn Cys Ile Ser Ile Pro Asn
Leu Phe Tyr Asn Glu Arg Ile Tyr Arg Ile His
<210> 152
<211> 26
<212> PRT
<213> Homo sapien
<400> 152
Met Pro Ser Ala Trp Lys Val Glu Asp Ser Gly Ile Arg Glu Arg Phe
Arg Pro Gly Glu Met Glu Gly Ser Gly Thr
        20
<210> 153
<211> 16
<212> PRT
<213> Homo sapien
<400> 153
Met Gln Val Trp Ser Gly Ile Phe Pro Asp Arg Gly Cys Cys Ser Cys
<210> 154
<211> 61
<212> PRT
<213> Homo sapien
<400> 154
Met Phe Met Trp His Arg Val Ala Asn Cys Leu Ser Leu Phe Val Ser
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Gln Asn Asp Phe Ala Asp Val Leu Gly Gln Ala Ser Pro Gly Trp Gln

Pro Gly Ala Ala Val Lys Phe Ser Leu Thr Asn Ser Leu Pro Pro Phe

Pro His His Gly Thr Leu Val Leu Cys Val Thr Thr Val 55

<210> 155

<211> 69 <212> PRT

<213> Homo sapien

<400> 155

Met Pro Cys Trp Lys Leu Leu Met Asn Arg Ala Trp Ser Leu Thr Leu

Gly Gly Gln Val Ile Tyr Arg Gly Asn Asp Asn Val Asn Pro Gly Pro

Trp Gly Ala Gly Ser Val Val Lys Glu Thr Gln His Thr Gln Gly Trp

Asp Pro Thr Gln Ala Lys Glu Gly Ser Thr Pro Ser Pro Asp Val Cys

Trp Asn Lys Glu Lys

<210> 156 <211> 51 <212> PRT

<213> Homo sapien

<220>

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<222> (7)..(7) <223> X=any amino acid

<400> 156

Met Lys Lys Lys Arg Phe Xaa Tyr Asn Ile Lys Ile Leu Val Asn Ser

Trp Leu Glu Leu Tyr Ser Glu Ile Thr Val Phe Lys Lys Asp Arg Pro 20

Leu Pro Leu Ser Leu Trp Leu Met Ala Leu Ile Ile Thr Arg Ile Pro 40

Lys Met Ser 50

<210> 157 <211> 126 <212> PRT

<213> Homo sapien

<400> 157

Met Lys Leu Leu Ser Arg Lys Met Trp His Ser Leu Leu Gly Gly

Trp Gly Gly Lys Arg Glu Gly Arg Cys Pro Gln Leu Pro Pro Arg 25

Ser Ile Asn Lys Lys Arg Ile Asp Pro Pro Ala Pro Phe Asn Ser Pro 35 40

Pro Glu Leu Pro Pro Asn Ser Val Lys Thr Cys Gly Phe Asp Tyr Ser 50

Asp Glu Asn Asn Gly Cys Ser Val Glu Ile Cys Arg Ala His Thr His 65 70

Met Ile Ser Lys Ser Asn Ser Val Ala Thr Val Pro Ile Arg Lys Thr 85

His Gln Ala His Lys Arg Asp Pro Phe Ile Gln Arg Ser Leu Cys Ile 100 105

Pro Ile Ser Thr His Ser Thr Cys Ile Phe Lys Pro Ile Ser 120

<210> 158

<211> 84

<212> PRT

<213> Homo sapien

<220>

<221> MISC_FEATURE <222> (21)..(21)

<223> X= any amino acid

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<223> X= any amino acid
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<223> X= any amino acid
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<222> (61)..(61)
<223> X= any amino acid
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Met Lys Arg Pro Pro Val Leu Leu Gln Glu Lys Pro Pro Glu Gly Asn
Gly Ala Val Ala Xaa Trp Pro Val Val Thr Pro Arg Arg Gly Arg Gly
Gln Gly Xaa Leu Gly Pro Gln Asn Ile Val Pro Val Xaa Ser Phe Xaa
Ala Gly Leu Xaa Leu Leu Arg Ser Leu Xaa Gly Ser Xaa Leu Asn Ser
Leu Leu Ser Ala Ser Trp Ala Val Val Ser Gly His Arg Leu Leu
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70

75

Thr Ser Pro Pro

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<210> 159
<211> 23
<212> PRT
<213> Homo sapien
<220>
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<222> (20)..(20)
<223> X=any amino acid
<400> 159
Met Asp Ser Ala Lys Leu Gly His Ile Cys Tyr Thr Asp Asp Thr Ser
Leu Asp Val Xaa Ala Gln Thr
       20
<210> 160
<211> 50
<212> PRT
<213> Homo sapien
<400> 160
Met Ile Asn Phe Ala Phe Val Val Cys His Lys Thr Thr Val Thr Val
Ser Leu Gln Leu Lys Ile Ile Gly Tyr Ala Thr Pro Glu Gly Asn Gln
His Ser Lys Cys Ile Pro Ser Ile Val Phe Ile Ile Cys Glu Arg Met
         35
                               40
Ser His
   50
<210> 161
<211> 57
<212> PRT
<213> Homo sapien
<400> 161
Met Met Pro Thr Asp Asn Leu Leu Met Ile Ser Ser Ile Leu Lys Asp
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10

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Val Cys Lys Thr Gln Pro Leu Arg Lys Asp Ser Tyr His Cys Ser His 25 20

Arg His Pro Pro Gln Ser Tyr Thr Phe Pro Phe His Pro Pro Lys Gln 40

Ile Ile Gln His Ile Tyr Phe Ile Leu

<210> 162

<211> 10

<212> PRT

<213> Homo sapien

<400> 162

Met Gly Ser Glu Arg Gly Ile Cys Gly Tyr

<210> 163

<211> 39 <212> PRT <213> Homo sapien

<400> 163

Met Leu Ser Arg Ser Ile Gln Asn Phe Asn Phe Lys Pro Ser Ser Arg

Ser Leu Leu Cys Tyr Leu Pro Ser Arg Pro Thr Thr Pro Val Ile Gln 25

Leu Ile His Ala Gln Ile Leu 35

<210> 164 <211> 77

<212> PRT

<213> Homo sapien

<220>

<221> MISC_FEATURE <222> (4)..(4)

<223> X=any amino acid

<400> 164

Met Ala Lys Xaa Trp Leu Val Gly Asp Val Lys Arg Arg Pro Pro Asp 5 10

Gly Thr Ile Ser Gln Cys Gly Ala Pro Arg His Trp Ser His Ile Ala 25

Asn Ser Asn Pro Gly Pro Ala His Gly Leu Trp Val Met Leu Ile Thr 40

Tyr Phe Pro Arg Leu Leu Phe Pro Ser Cys Lys Val Trp Ile Thr Ile 55

Ala Pro Val Ser Pro Gly Cys Gly Glu Asp Tyr Met Ser 70

<210> 165

<211> 72 <212> PRT <213> Homo sapien

<220>

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<222> (10)..(30)

<223> X=any amino acid

<400> 165

Met Leu Ile Leu Ile Ala Ser Lys Phe Xaa Xaa Xaa Xaa Xaa Xaa Xaa

20 25

Ser Ser Leu Val Ser Ser Leu Asp Leu Asn Glu Asn Ile Ser Val Tyr

Phe Thr Thr Lys Tyr Glu Leu Ala Ser Gly Cys Ala Leu Phe Tyr Phe 50

Tyr Thr Glu Cys Phe Lys Thr Asn 70

<210> 166

<211> 57

<212> PRT

<213> Homo sapien

<220>

<221> MISC_FEATURE <222> (10)..(30) <223> X=any amino acid

<400> 166

Met Ser Cys Ser Val Leu Leu Arg Lys Cys Tyr Asn Arg Ala Asp Gln

Phe His His Val Phe Ile Ile Thr Ile Leu Arg Trp Ala Leu Asn Thr 25

Ala Gln Gln Ala Cys His Phe His Leu Ile Ser Ser Ala Thr His Phe 40

Leu Leu Glu Leu Ala Ser Ser Asn Leu 55

<210> 167 <211> 121

<212> PRT

<213> Homo sapien

<400> 167

Met Thr Pro Leu Pro Gly Gly Glu Gln Leu Arg Glu Asn Trp Arg

Ala Gln Thr Thr Gln Leu Gly Arg Gly Gly Leu Met Glu Pro Arg 25

Ala Leu Arg Ala Ser Pro Gly Ser Ser Pro Pro Ala Pro Pro Leu Pro

Glu Ser Pro Ser Leu Ser Trp Cys Ala Gly Arg Thr Cys Ala Ala Ala

Ala Gly Gly Cys Thr Ser Gly Arg Glu Leu His Ala His Trp Glu 70 75

Gln Pro Met His Arg Pro Pro Arg Cys Ala Gln Val Ser Gly Ala Ser

Gly Lys Glu Glu Lys Ala Ala Val Ser Ala Leu Ser Leu Ser Leu Met 105

Pro Val Trp Asn Pro Thr Asp Glu Leu

<210> 168

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93
 <211> 17
<212> PRT
<213> Homo sapien
 <400> 168
 Met Gly Glu Val Val Tyr Leu Phe Lys Val Pro Cys Leu Val Tyr Thr
             5
 His
 <210> 169
 <211> 47
 <212> PRT
 <213> Homo sapien
 <400> 169
Met Ser Asn Tyr Tyr Ser Phe Ile Ile Asn Leu Asn Ser Phe Gln Ile
1 5
Arg Ala Thr Pro Ser Pro Cys Pro Leu Phe Gln Glu Tyr Phe Gly Ser
            20 25
Ser Trp Phe Phe Val Ser Pro Tyr Asp Asp Phe Thr Ile His Leu
                           40
<210> 170
<211> 33
<212> PRT
<213> Homo sapien
<400> 170
Met Lys Ala Ile Gln Ile Glu Glu Phe Phe Ala Ser Leu Leu Thr Gly
               5
Pro Gly Val Leu Asp Asn Phe Leu Ser Lys Glu Glu Lys Asn Ile Phe
                               25
His
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<210> 171 <211> 49 <212> PRT <213> Homo sapien <400> 171

Met Asp Ala Cys Leu Gly Asp Cys Gln Pro Gln Gly Arg Ser Ile Asp

Leu Lys Tyr Glu Gln Thr Asp Asp Phe Ile Ile Met Thr Leu Ala Gln 20 25

Asn Arg Asn Phe Gly Thr Glu Lys Asn Lys His Met Glu Phe Leu Lys 40

Gly

<210> 172

<211> 56

<212> PRT

<213> Homo sapien

<400> 172

Met Ser Leu Lys His Asn Asn Ile Ile Phe Tyr Ser Gln Glu Glu Leu 5

Ile His Asp Arg Ile Ile Ser Leu Ala Ile Leu Tyr Ser Tyr Phe Val 20 25

Leu Phe Ser Ser Phe Pro Leu Pro Phe Asp Asp Gln Phe Leu Tyr Lys 35 4.0

Thr His Arg Tyr Ile Pro Phe Ile

<210> 173 <211> 79

<212> PRT

<213> Homo sapien

<400> 173

Met Gly Glu Ile Gln Val Asp Leu Asn Cys His His Gln Ser Arg Pro 10

Arg Arg Arg Leu Leu Ser Arg Met Tyr Thr Trp Pro Leu Phe Ala Val

Ala Val Leu Leu Leu Arg Gly Glu Pro Ile Tyr Val Cys Leu Phe 45

Leu Leu Ser Leu Ala Ala Gln Gln Asn Pro Val Ile Tyr Met Asn Lys

50 55 60

Phe Leu Glu Val Lys Arg Asp Glu Lys Phe Thr Lys Ser Pro Thr

<210> 174

<211> 30

<212> PRT

<213> Homo sapien

<400> 174

Met Val Leu Lys Gly Met Asn Ile Thr Glu Ile Glu Cys Phe Leu Gln 5

Val Glu Arg Leu His Ser Leu Ala Gly Thr Phe Cys Pro Ile 25

<210> 175

<211> 73

<212> PRT

<213> Homo sapien

<400> 175

Met Ala Gly Ala Gly Gln His His Pro Pro Gly Ala Ala Gly Gly 5

Ala Ala Ala Gly Ala Gly Ala Ala Val Thr Ser Ala Ala Ala Ser Ala

Gly Pro Gly Glu Asp Ser Ser Asp Ser Glu Ala Glu Gln Glu Gly Pro

Gln Lys Leu Ile Arg Lys Val Ser Thr Ser Gly Gln Ile Arg Thr Lys 55 60

Gly Phe Ile Met Leu Ala Arg Leu Val 70

<210> 176

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<212> PRT

<213> Homo sapien

<220>

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<222> (22,...22, <223> X=any amino acid

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Met Glu Ile Trp Leu Leu Ala Leu Ala Phe Lys Lys Leu Ser Arg Arg 10

Phe Tyr Val Gln Pro Xaa Leu Gly Thr Thr Val Leu Gly Asn Ile Arg

Arg

<210> 177

<211> 22 <212> PRT <213> Homo sapien

<400> 177

Met Leu Phe Ser Ile Leu Pro His Lys Gly Tyr Ile Leu Lys Asp Ile 10

Trp Leu Leu Asn Leu Asn 20

<210> 178

<211> 45

<212> PRT

<213> Homo sapien

<220>

<221> MISC_FEATURE

<222> (21)..(21)

<223> X=any amino acid

<400> 178

Met Leu Leu Lys Gly Ser Asn Ser Lys Val Ser Arg Glu Tyr Ser Ala

Thr Phe His Lys Xaa Thr Glu Gln Ser Ser Arg Asn Phe Phe Arg Ala

Gly Ile Ala Leu Pro Pro Arg Ile Leu Thr Arg Phe Ser 40

<210> 179 <211> 38

<212> PRT

<213> Homo sapien

<220>

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<221> MISC_FEATURE
<222> (21)..(22)
<223> X=any amino acid
<400> 179
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Ala Val Lys Asp Xaa Xaa Lys Arg Leu Lys Ala Ile Leu His Ser Leu
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Val Tyr Met Lys Gly Asn
        35
<210> 180
<211> 65
<212> PRT
<213> Homo sapien
<400> 180
Ser Trp Cys Ser Gly Leu Met Pro Ser Val Leu Asn Ser Ile Ser Cys
Val Pro Gly Lys Gly Arg Gly His Ser Leu Glu Trp Phe Pro Gly Glu
Lys Ser Gln Ser Asn Leu Cys Ser Ser Phe Leu Asn Lys Asn Arg Arg
Gln Asn Lys Gly His Arg Asp Lys Gly Leu Leu Thr Arg Leu Ala Asn
    50
                         55
Gln
65
<210> 181
<211> 12
<212> PRT
<213> Homo sapien
<400> 181
Met Ala Phe Gly Ile Tyr Gln Cys Leu Gly Met Phe
                5
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<210> 182
<211> 23
<212> PRT
<213> Homo sapien
<220>
<221> MISC_FEATURE
<222> (21)..(21)
<223> X=any amino acid
<400> 182
Met Leu Leu Thr Pro Gln Pro Trp Phe Phe Lys Val Ile Phe Val Asn
Tyr Lys Val Arg Xaa Tyr Lys
            20
<210> 183
<211> 29
<212> PRT
<213> Homo sapien
<400> 183
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Met Tyr Lys Ile Arg Lys Ser Arg Pro Glu Glu Asp Ser His Cys Leu

Gln Arg Thr Ala Lys Gly Lys Gly Phe Lys Ile Phe Asn

<210> 184 <211> 58 <212> PRT <213> Homo sapien <400> 184

Met Leu Phe Leu Val Ser Ala Ala Leu Ser Ser Leu Thr Asp Asn

Cys Arg Ala Gln Val Gly Arg Lys Asn Ser Val Cys Leu Leu Gly Ser

Ala Ser Ala Pro Val Ser Asn Thr Gly Val Thr Gly Gly Leu Leu Asn

Val Lys Tyr Lys Gly Ser Ser Phe Ser Leu 50

<210> 185

<211> 21

<212> PRT <213> Homo sapien

<400> 185

Met Gln Cys Gln Gln Leu Gly Phe Ser Glu Ile Ile Ser Arg Leu Gln

Ser Asn Gln Ile Ser 20

<210> 186

<211> 16

<212> PRT

<213> Homo sapien

<400> 186

Met Lys Val Glu Arg Gln Phe Glu Ala Arg Ser Leu Thr Asp Ser Leu

<210> 187 <211> 104

<212> PRT

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<400> 187

Gln Ile Val Asn Phe Phe Phe Leu Arg Trp Ser Leu Ala Leu Val

Thr Gln Ala Gly Val Gln Trp Pro Asp Leu Ser Ser Leu Gln Pro Leu

Pro Pro Gly Phe Lys His Phe Ser Cys Leu Ser Leu Pro Ser Ser Ala

Asp Leu Ser His Val Pro Leu Cys Pro Ala Asn Phe Ala Asn Phe Phe

Val Glu Met Gly Ser His Cys Val Thr Gln Ala Gly Leu Ala Val Leu 70

Ala Ala Ser Asp Ser Leu Thr Leu Ala Pro Gln Ser Ala Gly Ile Ile

Gly Met Ser His Gly Ala Cys Pro 100

<210> 188 <211> 41

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<400> 188

Met Asp Arg Asp Leu Arg Pro Ala Pro Arg Asp Thr Lys Asp Gly Ser

Ser Val Ala Ser Ser Pro Asn Ser Ile Cys Pro Cys Leu Ala Arg Cys 25

Arg Glu Asp Phe Pro Thr Gln Glu Lys

<210> 189

<211> 39

<212> PRT

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<400> 189

Met Cys Leu Lys Gln Ile Leu Leu Glu Phe Pro Lys Arg Leu Asp Ile

Ile Asn Thr Phe Met Tyr Thr Trp His Pro Thr Arg Ala Val Cys Phe 20 25

Tyr Lys Lys Trp His Lys Asn 35

<210> 190 <211> 53

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<400> 190

Phe Ser Ser Leu Met Lys Val Ile Thr Asp Trp Ala Gln Trp Leu Thr 10

Pro Val Ile Pro Val Leu Trp Glu Val Ala Val Gly Ala Leu Glu

Ala Arg Ser Leu Arg Pro Ala Trp Glu Thr Ala Thr Pro Phe Pro Phe 35 40

Ala Lys Lys Lys 50

<210> 191 <211> 44

<212> PRT

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<400> 191

Met Lys Ala Leu Cys Arg Leu Ser Val Leu Gln Met Leu Val Met Gly 10

Met Val Val Met Arg Lys Val Met Pro Val Thr Met Arg Arg Gly Asp 25

Ala Val Asn Ser Ile His Pro Val Leu Gly Lys Tyr 40

<210> 192

<211> 53 <212> PRT <213> Homo sapien

<400> 192

Met Ser Leu Ser Leu Asp Ser Leu Ser Ser Ile Cys Leu Ile Val Asp

Leu Leu Asn Phe Ser Tyr Met Glu Phe Thr Glu Arg Leu Glu Cys Glu 20 25

Asp Gln His Phe Ser Ser Asn Leu Val Ser Phe Gln Ala Met Ile Ser

Ser Asp Ile Leu Pro 50

<210> 193

<211> 124 <212> PRT <213> Homo sapien

<400> 193

Met Arg Phe Leu Leu Pro Ala Ala Glu Lys Arg Lys Glu Asn Ser Ala 10

Gly Ala Pro Leu Ala Ser Pro Arg Val Thr Thr Met Phe Ser His Asp 20 25

Arg Gln Thr Gly Ala Leu Leu Cys Asp Pro Pro Arg Ala Ala Glu

Ser Ile Leu Ile His Leu Gly Thr Pro Ala Gln Glu Glu Pro Gly Pro 55

Ser Pro Phe Arg Asp Val Asp Pro Leu Arg Gly Glu Phe Ser Ser Val 75

Asp Ser Asp Leu Leu Arg Leu Thr Ser Leu Gly Asn Pro Ala Ile Ala

Val Gly Asn Gln Val Ala Ala Trp Ala His Met Ala Ser Arg Arg Leu 105

Arg Leu Thr Ser Lys Arg His Ser Gln Arg Arg Lys 115

<210> 194

<211> 44

<212> PRT

<213> Homo sapien

<400> 194

Met Phe Gln Arg Ile Ser Val Phe Ser Pro Ala Ile Thr Asn Lys Ser

Ser Gly Phe Ala Val Pro Pro Cys Lys Asn Tyr Lys Met Ala Glu Asn

Asn Ala Cys Phe Ile Ile Leu Val Lys Trp Ser Thr

<210> 195

<211> 27 <212> PRT <213> Homo sapien

<400> 195

Met Val Arg Arg His Ile Gly Ser Ala Val Arg Trp Pro Leu Phe Phe 10

Ser Asn Trp Ser Pro Tyr Ala Ser Cys Cys Asn

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<211> 31
<212> PRT
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Met Thr Lys Ile Cys Phe Leu Asn Pro Thr Leu Ala Phe Lys Lys Ile
Gln Ser Lys Ile Phe Arg Leu Phe Leu Lys Asp Glu Lys Ala Ala
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<211> 25
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<400> 197
Met Tyr Met His Tyr Arg Asp Arg Lys Thr Gln Phe Asn Ile Lys Asn
                5 10
Asn Ile Ser Leu Leu Asn Asn Ala Val
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Gly Cys Ile Leu Leu Gly Arg Gln Ser Tyr Glu Leu Asp Ala Met Trp
            20
                                 25
Pro Leu Gly Ala Leu Cys Arg Thr Ala Thr Ile Pro Ala Leu Leu Asp
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Gly Glu Ser Glu Ala Leu Arg Ser Asp Glu Asn Gln Trp Gln Ser Gln

60

55

50

Met Tyr His Phe Ser His Thr Leu Thr Phe Phe Cys Phe Val Pro Xaa

Phe Phe

<210> 199

<211> 46 <212> PRT

<213> Homo sapien

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Met Pro Leu Arg Ser Lys Leu Val Asn Ile His Leu Phe Leu Thr Thr

Ala Thr Val Phe Ser Leu Tyr Thr Asn Tyr Thr Ala Ser Lys Phe Ser

Ser Phe Pro Ala Ser Asn Gln Glu Phe Asn Met Glu Val Gln

<210> 200

<211> 74

<212> PRT

<213> Homo sapien

<400> 200

Met Gln Val Gln Arg Pro Thr Ser Trp Gly His Ile Ser Thr Ala Phe

Arg Ala Ala Pro Glu Ser Ser Arg Ser Phe Leu Ser Leu Leu Gln Thr

Phe Phe Glu Lys Trp Thr Phe His Pro His Val Pro Ser Val Trp Leu

Arg Lys Ser Thr Ser Gly Pro Trp Glu Gly Pro Gly Lys Pro Phe Pro

Leu Ser Leu Trp Cys Val Gly Ile Asn Leu

<210> 201 <211> 150 <212> PRT

<213> Homo sapien

<400> 201

Met Asn Gly Lys Thr Gln Cys Lys Ala Pro Asn Asp Ser Val Arg Ser 1 5 10 15

Val Val Gly Arg Thr Asn Thr Trp Ile His Arg Thr Glu Ile Asp Asn 20 25 30

Leu Ala Cys Asp Glu Leu Lys Ala Asp Ile Leu Asn Trp Trp Arg Lys 35 40 45

Glu Tyr Leu Leu Ile Ile Gly Ile Thr Ala Phe Leu Phe Leu Phe Arg 50 60

Gly Ala Ile Leu Lys Asp Lys Gln Pro Thr Gly Lys Leu Gly Gln His 65 70 75 80

Asn Thr Asn Arg Gln Cys Thr Val Glu Ile Tyr Lys Trp Pro Ile Asn 85 90 95

Met Glu Met Phe Asp Phe Val Arg Asn Gln Gly Asn Ser Ser Glu Asn 100 105 110

Lys Val Leu Ser Ile Thr Arg Leu Val Lys Thr Lys Gln Asn Asn Leu
115 120 125

Ser Ile Leu Ile Pro Leu Thr Val Gly Lys Gly Leu Glu Lys Trp Val 130 135 140

Leu Leu Trp Arg Val Asn 145 150

<210> 202

<211> 33

<212> PRT

<213> Homo sapien

<400> 202

Met Ala Ala Arg Leu Pro Thr Leu Thr Arg Tyr Lys Phe Ser Ser Leu 1 5 10 15

Gly Ser Trp Tyr Lys Ser Gln Pro Phe Gln Leu Val Met Asn Glu Arg

Ala

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<210> 203
<211> 68
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Ala Gln Lys Lys Lys Asp Xaa Ile Cys Cys Ser Gln Glu Met Leu His
Ile Val His Leu Pro Ala Ser Tyr Arg Xaa Tyr Lys Tyr Glu Ser Thr
Asn Ser Leu Gly Phe Asn Asn Val Thr Tyr Ile Tyr His Lys Val Ala
    50
                         55
                                                60
Ile Pro Asp His
65
<210> 204
<211> 34
<212> PRT
<213> Homo sapien
<400> 204
Met Thr Ala Ser Leu Cys Leu Gln Pro Lys Pro Leu Leu Ser Thr Asn
               5
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Pro Tyr Ala His Gly Ala Glu Thr Ala Gln Pro Ser Val Lys Glu Pro

Gly Phe

<210> 205 <211> 115 <212> PRT

<213> Homo sapien

<400> 205

Leu Ala Ala Ile Tyr Gly Phe Leu Ser Phe Phe Phe Phe Phe Phe

Ala Asp Lys Val Ser Leu Ser Pro Arg Leu Glu Ala Cys Asn Gly Thr

Ile Thr Ala His Gly Ser Phe Asp Phe Leu Gly Ser Gly Asp Pro Pro 40

Thr Ser Ala Ser Ala Ile Ala Gly Thr Gly Ala His His His Ile Ala

Leu Leu Phe Val Phe Phe Val Glu Val Gly Ser Arg Tyr Val Ala Gln 70

Ala Ala Leu Gln Leu Leu Arg Ser Gly Asp Leu Pro Ala Ser Ala Ser

Gln Ser Thr Gly Ile Thr Gly Thr Ser His Cys Ser Trp Pro Tyr Met 100 105

Val Leu Phe 115

<210> 206 <211> 28

<212> PRT

<213> Homo sapien

<400> 206

Met Phe Ala Ser Tyr Lys Leu Asn Asn Tyr Ser Tyr Pro Val Leu Val 10

Leu Tyr Ala Thr Leu Phe Pro His His Met Ile Phe

20 25

<210> 207

<211> 68

<212> PRT

<213> Homo sapien

<400> 207

Met Ser Leu Ser Pro Ile Tyr Phe Asn Ala Ser Phe Val Ile Ser Glu 5 10

Tyr Met Ser Asn Phe Tyr Phe Asn Ser Thr Cys His Leu Cys Tyr Glu 20 25

Asp Trp Lys Pro Ser Phe Ser Pro Gly Leu Gly Glu Ala Lys Cys Phe 35 40

Thr Tyr Leu Glu Cys Leu Cys His Ser Asn Phe Gln Leu Val Cys Asn 55

Cys Ser Phe Asn 65

<210> 208

<211> 39 <212> PRT <213> Homo sapien

<400> 208

Met Asn Glu Tyr Val Asn Glu Cys Leu Asn Glu Trp Ser Gly Met Asn

Pro Val Ser Pro Val Leu Cys Pro Pro Leu Ile His Ser Val Thr Leu 20 25 30

Gly Arg Thr Phe Asn His Ser 35

<210> 209

<211> 45

<212> PRT

<213> Homo sapien

<400> 209

Met Pro Phe Pro Ser His Ser Leu Leu His Phe Pro Pro Glu 10

Arg Leu Ser Ser Gly Pro Tyr Glu Ile Ala Ser Ile Gln Leu Phe Phe 25

Ile Leu Lys Gly Asp Asn Ser Ile Ser Phe Asn Leu Asn

<210> 210 <211> 70 <212> PRT

<213> Homo sapien

<400> 210

Leu Gly Ser Leu Gln Pro Pro Pro Pro Gly Phe Lys Ala Phe Ser Cys

Leu Ser Leu Pro Ser Ser Trp Asp His Ala Arg Pro Pro Ala Cys Leu

Ala Lys Phe Cys Ile Phe Ser Lys Asp Arg Val Ser Pro Cys Trp Pro

Gly Trp Ser Ala Thr Ala Asp Leu Val Ile Arg Pro Pro Leu Pro Pro

Lys Val Leu Gly Leu Gln

<210> 211

<211> 24

<212> PRT

<213> Homo sapien

<400> 211

Met Leu Asn Cys Leu Phe Cys Ile Leu Ala Ile Val Lys Ser Ala Thr

Asn Arg Ile Ala Asn Val Ser Ser

<210> 212

<211> 492

<212> PRT

<213> Homo sapien

<400> 212

Thr Lys Phe Ile Lys Leu Ser Lys Tyr Lys Asn Ile Ile Lys Lys Ser

Ala Ala Phe Leu Tyr Ile Ser Asn Tyr Leu Lys Met Lys Phe Lys Lys 20 25 30

Ile Pro Ser Thr Ala Leu Ala Phe Glu Val Asn Leu Thr Lys Lys Leu 35 40 45

Lys His Leu Thr Phe Tyr Ser Lys Glu His Tyr Thr Asn Ala Val Thr 50 60

His Lys Trp Asn Asn Ile Thr His Ser Ala Thr Gly Ile Phe Asn Ser 65 70 75 80

Ala Ile Phe Val Leu His Lys Met Ile Cys Arg Tyr Asn Ala Thr Ser 85 90 95

Ile Lys Ile Pro Val Thr Tyr Phe Ile Asp Ile Phe Lys Lys Ala Tyr 100 105 110

Leu Lys Phe Ile Trp Tyr His Lys Thr Pro Ala Ile Ala Lys Ala Ile 115 120 125

Lys Thr Lys Glu Gly Ile Thr Pro Asp Phe Glu Ile His Tyr Lys Thr 130 140

Val Val Thr Lys Thr Val Cys His Leu Asn Lys Asn Arg Asp Ile Gly 145 150 155

Gln Trp Ser Arg Arg Lys Arg Glu Gln Lys Tyr Ile Ser Val Phe Thr 165 170 175

Ala Asn Ala Phe Ala Ile Gln Val Thr Phe Phe Phe Ala Gly Lys Asn 180 185 190

Ser Ile Phe Asn Lys Ala Cys Leu Glu Asn Phe Met Ser Thr Cys Arg 195 200 205

Lys Lys Ala Asp Pro His Leu Thr Pro Tyr Val Lys Ile Asn Ser 210 215 220

Lys Ala Ile Ser His Leu Asn Val Arg Pro Lys Thr Leu Lys Leu Leu 225 230 235 240

Tyr Gln Lys Ile Glu Ala Lys Pro His Asn Ile Gly Leu Gly Ser Lys 245 250 255

Phe Phe Asp Leu Thr Ala Ile Ser Gln Asp Thr Lys Gly Arg Thr Ser 260 265 270

Gln Ser Asp His Phe Lys Leu Lys Ser Cys Cys Thr Glu Ser Asp Thr 275 280 285

Ala Thr Glu Val Thr Thr Lys Lys Arg Glu Lys Ile Phe Ala Asn Tyr 290 295 300

Thr Cys Asp Lys Gly Leu Ile Ala Lys Ile Tyr Thr Lys Leu Lys Ala 305 310 315 320

Gln Tyr Asn Lys Asn Lys Ala Leu Leu Lys Ile Ser Ser Ala Asn Lys
325 330 335

Tyr Phe Ser Arg Lys Tyr Ile His Met Ala Asn Ala Tyr Ile Ala Lys 340 345 350

Cys Ser Met Ser Ile Ile Thr Lys Lys Ala Ser Gln Lys Arg Lys Asn 355 360 365

Lys Thr Arg Arg Tyr Gln Leu Ile Pro Val Arg Met Thr Leu Ile Lys 370 375 380

Lys Lys Lys Arg Trp Ala Arg Cys Glu Glu Lys Gly Arg Leu Ala His 385 390 395 400

Cys Trp Phe Glu Cys Lys Ala Arg Gln Pro Leu Ala Lys Thr Lys Ala 405 410 415

Arg Phe Leu Lys Leu Lys Leu Pro Cys His Thr Ala Ile Ala Leu 420 425 430

Leu Asp Ile Tyr Pro Lys Gln Ile Lys Ser Glu Ala Arg Asn Ile Cys 435 440 445

Asn Ser Val Tyr Ala Leu Phe Thr Ile Ala Lys Ile Gln Asn Lys Ser 450 455 460

Leu Thr Ser Asn Glu Ala Met Lys Thr Met Trp Ala Ile Tyr Thr Thr 465 470 475 480

Glu Tyr Tyr Phe Ala Asn Lys Lys Ile Pro Phe Leu

<210> 213

<211> 37

<212> PRT

<213> Homo sapien

<400> 213

Met Met Leu Pro Pro Asn Leu Glu Asn Thr Gly Ser His Ile Ser Pro 5

Glu Trp Arg Phe Met Arg Arg Asn Thr Asn Glu Lys Lys Trp Ser

Met Lys Pro Glu Leu 35

<210> 214

<211> 67 <212> PRT <213> Homo sapien

<400> 214

Met Cys His Glu Leu Trp Pro Cys Leu Tyr Phe Tyr Phe Asn Arg Asn

His Leu Phe Lys Gln Lys Val Leu His Leu Asn Cys His Asn Cys Val 20

Cys Val Ile Asn Ile Ser Tyr Phe Ile Gln Ala Gln Pro Thr Leu Ala

Phe Ile Asn Ala His Asn Gln Glu Ile Asn Leu Ile Leu Thr Lys Asn

Tyr Pro Ser

<210> 215

<211> 12 <212> PRT

<213> Homo sapien

<400> 215

Met Ser His Asn Ile Asp Leu Leu Gly Lys Asp Phe

10

<210> 216

<211> 39 <212> PRT

<213> Homo sapien

<400> 216

Met Arg Glu Cys Gly Glu Ser Ile Cys Pro Ser Leu Ala Gly His Arg

Leu Ser Arg Gly Ala Val Glu Val Glu Thr Thr Gln Asp Ser Glu Ser

Pro Gln Val His Pro Gly Pro 35

<210> 217

<211> 89 <212> PRT <213> Homo sapien

<400> 217

Met Leu Ser Cys Cys Ser Gln Asn Gln Lys Met Ala Ser Arg Ser 5

Ala Gln Ser Ser Gln Glu Gln Met Leu Arg Val Thr Leu Glu Ser Phe

Cys Cys Leu His Ile Gln Thr Ile Thr Ile Ser Leu Ile Ser Leu Leu

Tyr Ile Phe His Met Cys Pro Leu Leu Ser Ile Cys Thr Leu Ile Ser

Glu Gly His Gln His Leu Ser Ser Glu Cys Leu Gln Tyr Leu Leu Thr

Gly His Gln Ala Ser Ser Phe Ala Pro

<210> 218 <211> 56 <212> PRT

<213> Homo sapien

<400> 218

Met Asp Cys Thr Ala Val Gly Arg Gly Thr Arg Arg Ala Ser Ala Pro 1 5 10 15

Thr Cys Glu Arg Arg Pro Arg Gly Leu Arg Cys Arg Arg Pro Val Ala 20 25 30

Pro Pro Pro Arg Ala Leu Ser Ala Val Asn Leu Gly Arg Arg Trp 35 40 45

Gly Ser Gly Lys Arg Arg Ala Gln 50 55

<210> 219

<211> 36

<212> PRT

<213> Homo sapien

<400> 219

Ala Ala Ala Ala Pro Pro Pro Ala Pro Pro His His Gly Ala Ala Ala 1 5 10 15

Pro Pro Pro Gly Gln Leu Ser Pro Ala Ser Pro Ala Thr Ala Ala Pro 20 25 30

Pro Ala Pro Ala 35

<210> 220

<211> 85

<212> PRT

<213> Homo sapien

<400> 220

Cys Ser Ala Asn Pro Leu Glu Ala Val Gln Lys Pro Leu Ala Ala Gly 20 25 30

Pro Thr Arg Arg Gly Gly Gly Trp Asp Pro Ala Gly Ala Gly Ala Ala 35 40 45

Trp Leu His Gly Leu Tyr Ser Val Tyr Thr Ala Gly Gly Arg Gly Gly 50 55 60

Arg Leu Arg Phe Leu Arg Tyr Gln Ser Arg Arg Phe Gly His Leu Arg

Ala Pro Ala Ala Gly

<210> 221 <211> 376 <212> PRT <213> Homo sapien

<400> 221

Met Met Ala Ser Tyr Pro Glu Pro Glu Asp Ala Ala Gly Ala Leu Leu

Ala Pro Glu Thr Gly Arg Thr Val Lys Glu Pro Glu Gly Pro Pro 25

Ser Pro Gly Lys Gly Gly Gly Gly Gly Gly Thr Ala Pro Glu Lys

Pro Asp Pro Ala Gln Lys Pro Pro Tyr Ser Tyr Val Ala Leu Ile Ala 50 55 60

Met Ala Ile Arg Glu Ser Ala Glu Lys Arg Leu Thr Leu Ser Gly Ile 65

Tyr Gln Tyr Ile Ile Ala Lys Phe Pro Phe Tyr Glu Lys Asn Lys Lys

Gly Trp Gln Asn Ser Ile Arg His Asn Leu Ser Leu Asn Glu Cys Phe

Ile Lys Val Pro Arg Glu Gly Gly Glu Arg Lys Gly Asn Tyr Trp

Thr Leu Asp Pro Ala Cys Glu Asp Met Phe Glu Lys Gly Asn Tyr Arg

Arg Arg Arg Met Lys Arg Pro Phe Arg Pro Pro Pro Ala His Phe

Gln Pro Gly Lys Gly Leu Phe Gly Ala Gly Gly Ala Ala Gly Gly Cys 165 170

Gly Val Ala Gly Ala Gly Ala Asp Gly Tyr Gly Tyr Leu Ala Pro Pro 180 185

Lys Tyr Leu Gln Ser Gly Phe Leu Asn Asn Ser Trp Pro Leu Pro Gln 195

Pro Pro Ser Pro Met Pro Tyr Ala Ser Cys Gln Met Ala Ala Ala Ala 210 215

Ala Ala Ala Ala Ala Ala Ala Ala Gly Pro Gly Ser Pro Gly 225 230 235

Ala Ala Ala Val Val Lys Gly Leu Ala Gly Pro Ala Ala Ser Tyr Gly 245 250

Pro Tyr Thr Arg Val Gln Ser Met Ala Leu Pro Pro Gly Val Val Asn

Ser Tyr Asn Gly Leu Gly Gly Pro Pro Ala Ala Pro Pro Pro Pro

His Pro His Pro His Pro His Ala His Leu His Ala Ala Ala Ala 290 295 300

Pro Pro Pro Ala Pro Pro His His Gly Ala Ala Pro Pro Pro Gly 315

Gln Leu Ser Pro Ala Ser Pro Ala Thr Ala Ala Pro Pro Ala Pro Ala

Pro Thr Ser Ala Pro Gly Leu Gln Phe Ala Cys Ala Arg Gln Pro Glu 345

Leu Ala Met Met His Cys Ser Tyr Trp Asp His Asp Ser Lys Thr Gly 360

Ala Leu His Ser Arg Leu Asp Leu 370 375

<210> 222

<211> 19

<212> PRT <213> Homo sapien

<400> 222

Met Gln Tyr Phe Ser Leu Pro Val Leu Thr Leu Leu Met Val Pro Phe 5

Ile Phe Ile

<210> 223

<211> 30 <212> PRT <213> Homo sapien

<400> 223

Met Pro Leu Lys His Ile Lys Phe Lys Asn Leu Phe Leu Leu Ala Leu

Glu Ile Leu Trp Asn Phe Thr Trp Asn Leu Ile Leu Gly Arg 20 25

<210> 224

<211> 52 <212> PRT

<213> Homo sapien

<400> 224

Met Leu Ile Met Lys Glu Thr His Glu Gln Leu Ser Glu Glu Ser Gly

Glu Val Gly Met Ile Ser Glu His Arg Gly Gly Ser Pro Ala Trp Gly

Leu Pro Asn Pro Asp Ala Gln Lys Phe Leu Ser Arg Pro His Tyr Thr 40

Gly Met Ile Asp 50

<210> 225 <211> 52 <212> PRT <213> Homo sapien

<400> 225

Met Gly Leu Asn Pro Gly Val Cys Leu Glu Pro Gln Leu Val Cys Asp

Thr Asp His His Phe Leu Lys Thr Ile Tyr Lys Asn Lys Thr Arg Cys 20 25

Met Lys Phe Arg Phe Trp Lys Lys Val Gln Val Phe Met Asn Ile Ser 40

Glu Leu Pro Lys 50

<210> 226 <211> 19 <212> PRT <213> Homo sapien

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<222> (14)..(14)

<223> X=any amino acid

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<223> X=any amino acid

<400> 226

Met Asp Asn Glu Asn Gln Asn Ile Lys Lys Glu Lys Lys Xaa Lys Lys 15

Lys Xaa Lys

<210> 227

<211> 75 <212> PRT <213> Homo sapien

<400> 227

Phe Phe Phe Leu Arg Gln Ser Leu Ala Leu Ser Pro Arg Leu Glu Cys 5 10

Ser Gly Ala Ile Ser Ala His Cys Lys Leu Arg Leu Pro Gly Ser Cys 20 25

His Phe Pro Ala Ser Ala Ser Gln Val Ala Glu Thr Thr Gly Thr Arg 35

His Asn Ala Arg Val Ile Phe Cys Ile Leu Val Glu Thr Gly Phe His 50

Arg Val Ser Gln Asp Gly Leu Asp Leu Leu Thr 65 70 75

<210> 228

<211> 95

<212> PRT

<213> Homo sapien

<400> 228

Met Arg Arg Ala Lys Ala Pro Lys Ile Arg Gly Thr Ala Asn Ala Thr 1 5 10 15

Asp Arg Lys Lys Ala Glu Gly Lys Ser Ala Ser Ser Arg Leu Arg Pro 20 25 30

Arg Gly Pro Ala Leu Ala Pro Ala Ser Ile His Arg Glu His Thr Gln 35 40 45

Glu Ala Phe Glu Trp Pro Gly Phe Leu Val Ser Leu Ala Gln Arg Gln 50 60

Glu Leu Glu His Glu Arg Ser Ser Glu Thr Leu Trp Val Leu Pro Thr 65 70 75 80

Leu Arg Gln Ala Ser Gln His Leu His Ala Leu Leu Cys Ser Pro 85 90 95

<210> 229

<211> 98

<212> PRT

<213> Homo sapien

<400> 229

Met Val Gly Ala Ser Pro Gly Gly Met Gly Cys Glu Gly Gly Arg Met
1 10 15

Arg Ala Arg Arg Phe Ser Leu Gly Asp Pro Ala Thr Gln Ser His Leu 20 25 30

Pro Leu Thr Glu Gly Ser Arg Ala Pro Ser Gly Pro Leu Ala Thr Lys 35 40 45

Ala Gln Leu Lys Ser Gln Lys Gly His Ile Arg Ser Gln Ala Thr Gly 50 55

Thr Ala His Val Arg Asn Val Ser Ala Met Glu Lys Tyr Lys Thr Arg 75

Lys Glu Val Cys Gly Pro Asn Arg Thr Cys Leu Ser Thr Phe Tyr Cys 90

Asn Val

<210> 230

<211> 84

<212> PRT <213> Homo sapien

<400> 230

Met Asp Thr Thr Asn Asn Gln Ile Asn Leu Tyr Ile His Thr Lys Phe

Phe Leu Lys Ile Lys Val Asn Thr Ser Ile Ser Lys Arg Leu Phe Ser 20 25

Pro Tyr Phe Asn Ile His Ile Phe Cys Met Phe Ile Tyr Val His Gly

Gly Cys Phe Tyr Ile Pro Arg Lys Phe Arg Cys Tyr Ser Arg Arg Leu 50 55

Ser Ile Ile His Thr Ala Val Lys Trp Ser Pro Ala Leu Ser Arg His

Pro Thr Ala Gln

<210> 231

<211> 924 <212> PRT <213> Homo sapien

<400> 231

Gly Arg Leu Thr Phe Arg Asp Val Ala Ile Glu Phe Ser Leu Ala Glu 5

Trp Lys Cys Leu Asn Pro Ser Gln Arg Ala Leu Tyr Arg Glu Val Met 20 25 3.0

Leu Glu Asn Tyr Arg Asn Leu Glu Ala Val Asp Ile Ser Ser Lys Arg

35 40 45

His Asp Glu Gly Gly Leu Val Asn Arg Ala Arg Gln Tyr Arg Ser Asp 50 55 60

Pro His Arg Asp Ile Ala Lys Ile Ser Lys Leu Ser His Trp Arg Phe 65 70 75 80

Leu Leu Pro Gly Asn Ala Glu Arg Asn Ser Ala Tyr Ala Val Ser Val 85 90 95

Ser Arg Arg Glu Arg Asn Gly His Glu Ala Pro Met Thr Lys Ile Lys
100 105 110

Lys Leu Thr Gly Ser Thr Asp Gln His Asp His Arg His Ala Gly Asn 115 120 125

Lys Pro Ile Lys Asp Gln Leu Gly Ser Ser Phe Tyr Ser His Leu Pro 130 135 140

Glu Leu His Ile Ile Gln Ile Lys Gly Lys Ile Gly Asn Gln Phe Glu 145 150 155 160

Lys Ser Thr Ser Asp Ala Pro Ser Val Ser Thr Ser Gln Arg Ile Ser 165 170 175

Pro Arg Pro Gln Ile His Ile Ser Asn Asn Tyr Gly Asn Asn Ser Pro 180 185 190

Asn Ser Ser Leu Leu Pro Gln Lys Gln Glu Val Tyr Met Arg Glu Lys 195 200 205

Ser Phe Gln Cys Asn Glu Ser Gly Lys Ala Phe Asn Cys Ser Ser Leu 210 215 220

Leu Arg Lys His Gln Ile Pro His Leu Gly Asp Lys Gln Tyr Lys Cys 225 230 230

Asp Val Cys Gly Lys Leu Phe Asn His Lys Gln Tyr Leu Thr Cys His 245 250 255

Arg Arg Cys His Thr Gly Glu Lys Pro Tyr Lys Cys Asn Glu Cys Gly 260 265 270

- Lys Ser Phe Ser Gln Val Ser Ser Leu Thr Cys His Arg Arg Leu His 275 280 285
- Thr Ala Val Lys Ser His Lys Cys Asn Glu Cys Gly Lys Ile Phe Gly 290 295 300
- Gln Asn Ser Ala Leu Val Ile His Lys Ala Ile His Thr Gly Glu Lys 305 310 315 320
- Pro Tyr Lys Cys Asn Glu Cys Asp Lys Ala Phe Asn Gln Gln Ser Asn 325 330 335
- Leu Ala Arg His Arg Arg Ile His Thr Gly Glu Lys Pro Tyr Lys Cys 340 345 350
- Glu Glu Cys Asp Lys Val Phe Ser Arg Lys Ser Thr Leu Glu Ser His 355 360 365
- Lys Arg Ile His Thr Gly Glu Lys Pro Tyr Lys Cys Lys Val Cys Asp 370 375 380
- Thr Ala Phe Thr Trp Asn Ser Gln Leu Ala Arg His Lys Arg Ile His 385 390 395 400
- Thr Gly Glu Lys Thr Tyr Lys Cys Asn Glu Cys Gly Lys Thr Phe Ser 405 410 415
- His Lys Ser Ser Leu Val Cys His His Arg Leu His Gly Gly Glu Lys 420 425 430
- Ser Tyr Lys Cys Lys Val Cys Asp Lys Ala Phe Ala Trp Asn Ser His 435 440 445
- Leu Val Arg His Thr Arg Ile His Ser Gly Gly Lys Pro Tyr Lys Cys 450 455 460
- Asn Glu Cys Gly Lys Thr Phe Gly Gln Asn Ser Asp Leu Leu Ile His 465 470 475 480
- Lys Ser Ile His Thr Gly Glu Gln Pro Tyr Lys Tyr Glu Glu Cys Glu
 485 490 495
- Lys Val Phe Ser Cys Gly Ser Thr Leu Glu Thr His Lys Ile Ile His 500 505 510

Thr Gly Glu Lys Pro Tyr Lys Cys Lys Val Cys Asp Lys Ala Phe Ala 515 520 525

Cys His Ser Tyr Leu Ala Lys His Thr Arg Ile His Ser Gly Glu Lys 530 540

Pro Tyr Lys Cys Asn Glu Cys Ser Lys Thr Phe Arg Leu Arg Ser Tyr 545 550 560

Leu Ala Ser His Arg Arg Val His Ser Gly Glu Lys Pro Tyr Lys Cys 565 570 575

Asn Glu Cys Ser Lys Thr Phe Ser Gln Arg Ser Tyr Leu His Cys His 580 590

Arg Arg Leu His Ser Gly Glu Lys Pro Tyr Lys Cys Asn Glu Cys Gly 595 600 605

Lys Thr Phe Ser His Lys Pro Ser Leu Val His His Arg Arg Leu His 610 620

Thr Gly Glu Lys Ser Tyr Lys Cys Thr Val Cys Asp Lys Ala Phe Val 625 630 635

Arg Asn Ser Tyr Leu Ala Arg His Thr Arg Ile His Thr Ala Glu Lys 645 650 655

Pro Tyr Lys Cys Asn Glu Cys Gly Lys Ala Phe Asn Gln Gln Ser Gln 660 665 670

Leu Ser Leu His His Arg Ile His Ala Gly Glu Lys Leu Tyr Lys Cys 675 680 685

Glu Thr Cys Asp Lys Val Phe Ser Arg Lys Ser His Leu Lys Arg His 690 695 700

Arg Arg Ile His Pro Gly Lys Lys Pro Tyr Lys Cys Lys Val Cys Asp 705 710 715 720

Lys Thr Phe Gly Ser Asp Ser His Leu Lys Gln His Thr Gly Leu His 725 730 735

Thr Gly Glu Lys Pro Tyr Lys Cys Asn Glu Cys Gly Lys Ala Phe Ser 740 745 750

Lys Gln Ser Thr Leu Ile His His Gln Ala Val His Gly Val Gly Lys 755 760 765

Leu Asp Ala Cys Asn Asp Cys His Lys Val Phe Ser Asn Ala Thr Thr 770 775 780

Ile Ala Asn His Trp Arg Ile Tyr Asn Glu Ala Arg Ser Asn Lys Cys
785 790 795 800

Asn Lys Cys Gly Lys Phe Phe Arg His His Ser Tyr Ile Ala Val His 805 810 815

Ala His Thr His Thr Gly Glu Lys Pro Tyr Lys Cys His Asp Cys Gly 820 825 830

Lys Val Phe Ser Gln Ala Ser Ser Tyr Ala Lys His Arg Arg Ile His 835 840 845

Thr Gly Glu Lys Pro His Met Cys Asp Asp Cys Gly Lys Ala Phe Thr 850 855 860

Ser Cys Ser His Leu Ile Arg His Gln Arg Ile Pro Thr Gly Gln Lys 865 870 875 880

Ser Tyr Lys Cys Gln Lys Cys Gly Lys Val Leu Ser Pro Arg Ser Leu 885 890 895

Leu Ala Glu His Gln Lys Ile His Phe Ala Asp Asn Cys Ser Gln Cys 900 905 910

Ser Glu Tyr Ser Lys Pro Ser Ser Ile Asn Ala His 915 920

<210> 232

<211> 322

<212> PRT

<213> Homo sapien

<220>

<221> MISC_FEATURE

<222> (291)..(299)

<223> X=any amino acid

<400> 232

- Met Leu Ala Ala Cys Leu Met Thr Pro Asp His Pro Thr Ala Gly Asn 1 5 10 15
- Gln Pro Leu Arg Thr Pro Ser His Val Pro Gly Thr Cys Arg Cys Arg 20 25 30
- Ser Gln His Pro Ala Val Trp Ala Leu Tyr Asp Asp Gln Leu Gly Asn 35 40 45
- Val Gly Asp His His Val Ala Thr His Met Val Gly Pro His Asp His 50 60
- Ile Leu Pro Ile Leu Gln Leu Leu Leu Pro Gly Asp Leu Arg Pro Gly 65 70 75 80
- Pro Ala His His Ile Thr Glu Glu Thr His Cys Leu Thr His Gly Asp 85 90 95
- Arg Leu Val His Thr Val Val Glu Gln Arg Arg Asp Arg His Val Gln 100 105 110
- Leu Arg Gly Leu Trp Gly Gly Cys Ala Gly Val His Gly Gly Leu Arg 115 120 125
- Cys Trp Gly Ala Gly Val Gly Pro Gly Glu Val Ile Ala Ala Gly Tyr 130 135 140
- Asn Gly Gln Cys Asp Ala Phe Gly Ala Gly Leu Gly Ile His Val Ala 145 150 155 160
- Ala Val Ile Val Gly Glu Ala Val Arg Gly Ala Gly Lys Ala Gly Leu 165 170 175
- Leu Leu Thr Ala Val Phe Ala Leu Thr His Gly Leu Ala Ile Pro Asp 180 185 190
- Val Thr Leu Arg Ala Leu Leu Gln Thr His Glu Val Val Thr Cys Gly
 195 200 205
- Leu Leu Gly His Ala His Trp Ala Leu Leu Pro Phe His Val His Val 210 215 220
- Ala Gly Arg His Ala Ala Leu Gly Pro Thr Tyr Val Gly Ala Ala Leu 225 230 235 240

Leu Ile Gly Leu Thr Leu Leu Val Arg Leu Thr Leu Pro Pro Ala Gly 250

Ala Leu Cys Val His Pro Glu Val Gly Ile His Val Val Gly Ala Asp 265

Ala Gly Val Gly Ile Ala Asp Gly Arg Gln Arg Gln Ala Ser Arg Gly 280

His Pro Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Cys His Leu Leu Pro 295

Ala Arg Pro Glu Pro Ala Thr Pro Trp Gly Pro His Gly Ala Gly Trp

Gly Gly

<210> 233

<211> 503 <212> PRT <213> Homo sapien

<400> 233

Glu Cys Glu Thr Tyr Glu Lys Cys Cys Pro Asn Val Cys Gly Thr Lys

Ser Cys Val Ala Ala Arg Tyr Met Asp Val Lys Gly Lys Lys Gly Pro 25

Val Gly Met Pro Lys Glu Ala Thr Cys Asp His Phe Met Cys Leu Gln 35 40

Gln Gly Ser Glu Cys Asp Ile Trp Asp Gly Gln Pro Val Cys Lys Cys 50 55

Lys Asp Arg Cys Glu Lys Glu Pro Ser Phe Thr Cys Ala Ser Asp Gly 70

Leu Thr Tyr Tyr Asn Arg Cys Tyr Met Asp Ala Glu Ala Cys Ser Lys

Gly Ile Thr Leu Ala Val Val Thr Cys Arg Tyr His Phe Thr Trp Pro 100 105

- Asn Thr Ser Pro Pro Ala Pro Glu Thr Thr Met His Pro Ser Thr Ala 115 120 125
- Ser Pro Glu Thr Pro Glu Leu Asp Met Ala Val Pro Ala Leu Leu Asn 130 135 140
- Asn Arg Val His Gln Ser Val Thr Met Gly Glu Thr Val Ser Phe Leu 145 150 155 160
- Cys Asp Val Val Gly Arg Pro Arg Pro Glu Ile Thr Trp Glu Lys Gln 165 170 175
- Leu Glu Asp Arg Glu Asn Val Val Met Arg Pro Asn His Val Arg Gly
 180 185 190
- Asn Val Val Thr Asn Ile Ala Gln Leu Val Ile Tyr Asn Ala Arg 195 200 205
- Leu Gln Asp Ala Gly Ile Tyr Thr Cys Thr Ala Arg Asn Val Ala Gly 210 215 220
- Val Leu Arg Ala Asp Phe Pro Leu Ser Asp Gly Gln Gly Ser Ser Gly 225 230 235 240
- Met Gln Pro Ala Ser Glu Ser Ser Pro Asn Gly Thr Ala Phe Pro Ala 245 250 255
- Ala Glu Cys Leu Lys Pro Pro Asp Ser Glu Asp Cys Gly Glu Glu Gln 260 265 270
- Thr Arg Trp His Phe Asp Ala Gln Ala Asn Asn Cys Leu Thr Phe Thr 275 280 285
- Phe Gly His Cys His Arg Asn Leu Asn His Phe Glu Thr Tyr Glu Ala 290 295 300
- Cys Met Leu Ala Cys Met Ser Gly Pro Leu Ala Ala Cys Ser Leu Pro 305 310 315 320
- Ala Leu Gln Gly Pro Cys Lys Ala Tyr Ala Pro Arg Trp Ala Tyr Asn 325 330 335
- Ser Gln Thr Gly Gln Cys Gln Ser Phe Val Tyr Gly Gly Cys Glu Gly 340 345 350

Asn Gly Asn Asn Phe Glu Ser Arg Glu Ala Cys Glu Glu Ser Cys Pro 355 360 365

Phe Pro Arg Gly Asn Gln Arg Cys Arg Ala Cys Lys Pro Arg Gln Lys 370 375 380

Leu Val Thr Ser Phe Cys Arg Ser Asp Phe Val Ile Leu Gly Arg Val 385 390 395 400

Ser Glu Leu Thr Glu Glu Pro Asp Ser Gly Arg Ala Leu Val Thr Val 405 410 415

Asp Glu Val Leu Lys Asp Glu Lys Met Gly Leu Lys Phe Leu Gly Gln 420 425 430

Glu Pro Leu Glu Val Thr Leu Leu His Val Asp Trp Ala Cys Pro Cys 435 440 445

Pro Asn Val Thr Val Ser Glu Met Pro Leu Ile Ile Met Gly Glu Val 450 460

Asp Gly Gly Met Ala Met Leu Arg Pro Asp Ser Phe Val Gly Ala Ser 465 470 475 480

Ser Ala Arg Arg Val Arg Lys Leu Arg Glu Val Met His Lys Lys Thr 485 490 495

Cys Asp Val Leu Lys Glu Phe 500

<210> 234

<211> 89

<212> PRT

<213> Homo sapien

<400> 234

Met Phe Leu Phe Leu Leu Gln Pro Pro Pro Ser Ser Leu Ser Pro Leu 1 5 10 15

Leu Pro Pro Ser Leu Pro Ala Phe Ser Ser Ser Phe Ile Ser Pro Ala 20 25 30

Thr Lys Gln Ile Pro Gly Leu Leu Ser Asp Leu Cys Pro Arg Lys Pro 35 40 45

Val Ala Tyr Glu Ser Thr Pro Ser Ile Arg Gln Lys Leu Gln Thr Val 50 55 60

Val Ser Pro Ala Glu Gly Cys Val Trp Gly Pro Trp Asp Glu Gly Ile 70 75

Cys Val Gly Ala Leu Arg Thr Gly Gln 85

<210> 235 <211> 29 <212> PRT <213> Homo sapien

<400> 235

Met Gly Gly Ala Leu Leu Pro Pro Asp Arg Asp Glu Ser Pro Arg Tyr 5 10

Leu Leu Asn Leu Cys Asn Thr Pro Ala Gly Lys Leu Gly 20

<210> 236

<211> 38 <212> PRT

<213> Homo sapien

<400> 236

Met Pro Ser Leu Ser Glu Ser Ile Leu Leu Ser Ser Glu Val Cys Asp 5 10

Trp Thr Lys Leu Ser Thr Ile Phe Ser Ser Ala Asn Asn Leu Leu Leu

Ile Cys Cys Lys Val Ser 35

<210> 237

<211> 33 <212> PRT <213> Homo sapien

<400> 237

Met Leu Pro Ser Gly Val Lys Lys Phe Phe Val Asp Arg Ala Phe Glu 10

Leu Arg Ser Phe Lys Tyr Thr Thr Asp Val Pro Leu Arg Glu Thr Asp 25

Leu

<210> 238 <211> 88 <212> PRT <213> Homo sapien

<400> 238

Met Gln Ala Ser Pro Leu Gln Ile Arg Gln Asn Pro Ala Leu Phe Leu

Val Met Thr Phe Pro Thr Ala Arg Gly His Lys Ser Met Ile Gln His 25

Tyr Arg Asn Pro Pro Thr Ser Arg Lys Val Ser Thr Thr His Lys Asp 40

Ser His Val His Ala Asp Thr Lys Thr His Phe Arg Glu Glu Ala Pro 55

Arg His Ser Leu Lys Pro Gln Leu Gly Thr Phe Leu His Asp Asn Ser 70 75

Ser Ala Ser Leu Gly Gln Cys Asn 85